

# METAL WORKING FLUIDS

## ELASTOMER (SEAL/MWF COOLANT COMPATIBILITY)

Elastomer	Synthetic	Semi-Synthetic	Soluble Oil	Straight Oil	Water Glycol
Natural Rubber (NR)	poor	poor	poor causes swelling	poor causes swelling	fair
Latex	poor	poor	poor causes swelling	poor causes swelling	fair
Polyisoprene	poor	poor	poor causes swelling	poor causes swelling	fair
Isoprene Rubber (IR)	poor	poor	poor	poor	fair
Styrene/Butadiene (SBR)	poor	poor	poor	poor	good
Rubber	poor	poor	poor	poor	good
Mid-ACN Nitrile Buna N	good	good	good	good	excellent
High ACN Nitrile-Buna N	excellent	excellent	excellent	excellent	excellent
(EPR) (EPDM)	fair	fair	fair	fair	good
Ethylene-propylene rubber	fair	fair	fair	fair	good
Nylon	good	good	good	good	good
Neoprene	poor causes brittleness and shrinkage	fair	good	good	fair
Butyl (IIR)	fair	poor	poor causes swelling	poor causes swelling	good
Polysulfide Rubber	fair	fair	good	good	good
Urethane	poor	poor	fair	fair	poor
Silicone	fair	fair	poor	poor	poor
Fluorinated	good	good	good	good	good
Silicone	good	good	good	good	good
Polyacrylate	poor	poor	good	good	good
(PTFE) (TEF)	excellent	excellent	excellent	excellent	excellent
Teflon/Kalrez	excellent	excellent	excellent	excellent	excellent
Viton	excellent	excellent	excellent	excellent	excellent
Fluorocarbon (FPM) Rubber	excellent	excellent	excellent	excellent	excellent
Fluorel Kel-F	excellent	excellent	excellent	excellent	excellent

### NOTES

This information is provided as a general guideline. Compatibilities are based on general product chemistry. Variations between specific products may result in different compatibilities.

For best results; it is recommended to always use Viton. When choosing Buna-N; it is recommended to use the High-ACN grade of Buna-N. Mid-ACN grade of Buna-N is acceptable for use with diluted metalworking fluids; however is more susceptible to degradation than high Buna-N when in contact with metalworking fluid concentrates.